



THE EUCLID CHEMICAL COMPANY

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EUCOLASTIC I

ONE PART URETHANE SEALANT

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EUCOLASTIC I is a one part urethane sealant for sealing and protecting moving joints of all types.

PRIMARY APPLICATIONS

- Concrete construction & control joints
- Precast concrete member
- Masonry units
- Window perimeters
- Interior and exterior applications

FEATURES/BENEFITS

- Available in both gun grade (non-sag) and pourable for universal applications
- Ultraviolet stable for outdoor use
- Remains adhesively and cohesively bonded during temperature cyclic movement
- Passes accelerated weathering test for suitability in harsh environments

SPECIFICATIONS/COMPLIANCES

- EUCOLASTIC I (gun grade) meets Federal Specification TT-S-00230C, Type II, class A. This product also meets industry standard ASTM C 920-86, Type S, Grade NS, Class 25.
- EUCOLASTIC I (pourable grade) meets Federal Specification TT-S-00230C, Type I, Class A. This product also meets industry standard ASTM C 920-86, Type S, Grade P, Class 25.

PACKAGING/YIELD

EUCOLASTIC I (gun grade) is packaged in 11 oz (325 ml) tubes and 2 gal (7.6 liter) bulk units. One 11 oz (325 ml) tube yields 19 in³ (311 cm³) of product. One 2 gal (7.6 liter) bulk unit yields 462 in³ (7571 cm³) of product.

EUCOLASTIC I (pourable grade) is packaged in 30 oz (887 ml) tubes and 2 gal (7.6 liter) bulk units. One 30 oz (887 ml) tube yields 54 in³ (884 cm³) of product. One 2 gal (7.6 liter) bulk unit yields 462 in³ (7571 cm³) of product.

TECHNICAL INFORMATION

Typical Engineering Data

The following results were developed under laboratory conditions.

EUCOLASTIC I: (gun grade)

Physical Properties	Actual	Specification Requirement
Rheological properties		
@ 40°F (4°C)	No Flow	No Flow
@ 122°F (50°C)	No Deformation	No Deformation
Extrusion Rate	7 seconds	45 seconds max
Shore A Hardness	40	15-50
Elongation	250%	
Weight Loss	9%	10% max
Tack Free Time	30 hours	72 hours max
Adhesion-in-Peel (<25% bond loss)		
Concrete	20-25 PLI	> 5 PLI
Aluminum	18-22 PLI	> 5 PLI
Brick	19-23 PLI	> 5 PLI

EUCOLASTIC I: (pourable grade)

Physical Properties	Actual	Specification Requirement
Rheological properties		
@ 40°F (4°C) or higher	Self-Leveling	Self-Leveling
Extrusion Rate	3 seconds	20 seconds max
Hardness	35	25-50
Weight Loss	5%	10% max
Tack Free Time	30 hours	72 hours max
Adhesion-in-Peel (<25% bond loss)		
Concrete	16-20 PLI	> 5 PLI
Aluminum	30-34 PLI	> 5 PLI
Granite	30-34 PLI	> 5 PLI

EUCOLASTIC I will accept normal traffic in 48 hours if curing temperature is 70°F (21°C) and 50% relative humidity. Expect complete cure within two weeks.

Shelf life of bulk material is 1 year in original, unopened package. Shelf life of material in tubes is six months in original, unopened package.

Appearance

EUCOLASTIC I is available in the following colors:

Gun Grade:

- Standard: bronze, white, limestone and gray
- Special Order*: aluminum, beige and black

Pourable Grade:

- Standard: white, limestone and gray
- Special Order*: buff and black

* May require two week lead time.

The following chemical resistance guide is applicable to both the gun and pourable grade.

Acids*	Concentration	Splash & Spillage	Immersion
Acetic Acid	25%	OK	OK
Butyric Acid	25%	OK	OK
Citric Acid	25%	OK	OK
Oxalic Acid	25%	OK	OK
Lactic Acid	25%	OK	OK
Hydrochloric Acid	40%	OK	OK
Hydrobromic Acid	50%	OK	OK
Phosphoric Acid	50%	OK	OK
Carbonic Acid	Any	OK	OK
Sulfuric Acid	Max. 50%	OK	OK
Muriatic Acid	40%	OK	OK
Nitric Acid	5% Max.	OK	NO
Chromic Acid	5% Max.	OK	NO
Perchloric Acid	5% Max.	OK	NO
Alkalis			
Caustic Soda	10%	OK	NO
Caustic Potash	10%	OK	NO
Sodium Hydroxide	10%	OK	NO
Potassium Hydroxide	10%	OK	NO
Calcium Hydroxide	10%	OK	NO
Ammonium Hydroxide	10%	OK	NO
Solvents			
Benzene	100%	OK	softens/swells
Toluene	100%	OK	softens/swells
Xylene	100%	OK	softens/swells
Gasoline	100%	OK	softens/swells
Mineral Spirits	100%	OK	softens/swells
Paint Thinner	100%	OK	softens/swells
Lacquer Thinner	100%	OK	softens/swells
Methylene Chloride	100%	OK	softens/swells
Ester Solvents	100%	OK	softens/swells
Acetone	100%	OK	softens/swells
Methyl Alcohol	100%	OK	softens/swells
Ethylene Glycol	30%	OK	OK
Ethyl Alcohol	100%	OK	OK
Methyl Ethyl Ketone	100%	OK	OK
Miscellaneous			
Lubricating Oil	100%	OK	OK
Diesel Fuel	100%	OK	OK
Neutral Salt Solutions	30%	OK	OK
Liquid Nitrogen	---	OK	NO
Liquid Oxygen	---	NO	NO
Liquid Ammonia	---	NO	NO
Dry Fertilizer	---	NO	NO

*This product is not designed for chemical resistance above normal room temperatures.

DIRECTIONS FOR USE

Joint Design-EUCOLASTIC I may be used in any joint designed in accordance with accepted architectural or engineering practice. Joint width should be 4 times the expected joint movement, but not less than 1/4" (6 mm).

Joint Dimensions-Width to depth ratios should be equal for joints up to 1/2" (13 mm) in width with 1/4" (6mm) being the minimum width. Keep sealant depth at 1/2" (13 mm) on widths over 1/2" (13 mm).

Surface Preparation-New concrete must be minimum of 28 days old. The joint must be clean and sound. All oil, dirt, debris, paint and any other material that could be a bond breaker must be removed. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing.

All joint facings must possess an open surface texture with all curing compounds and sealers removed.

Priming-EUCOLASTIC/NEO SEAL PRIMER should be used to prime the joint facing when the product will be used on unusually non porous surfaces (metal, granite, etc.) or unusual applications (underwater). The EUCOLASTIC/NEO SEAL PRIMER must be ordered separately. Estimated Coverage-Primer-2400 lineal feet per gallon per 1/2" of depth of double face joint (193 lineal meters per liter per 13 mm of depth of double face joint).

Mixing-EUCOLASTIC I is a one part product and requires no pre-blending. It should be used directly from the container.

Placement-EUCOLASTIC I may easily be applied with conventional caulking equipment. Pourable and gun-grade cartridges can be used with a standard caulking gun. Horizontal joints requiring large quantities of material may be dispensed directly from the pail or a can with a pour spout.

Finishing-Although not normally required, tooling should be done immediately when necessary. Water or solvent may be used if necessary.

Curing-EUCOLASTIC I requires no special curing instructions. A skin forms on the surface within 24 hours @ 75°F (24°C) and 50% relative humidity. Total cure time should be within 2 weeks after placement.

CLEAN-UP

Tools, equipment and general clean-up can be done with EUCO SOLVENT, xylol or toluene.

PRECAUTIONS/LIMITATIONS

- Use only at temperatures above 40°F (4°C).
- Contact surfaces must be clean and dry.
- Proper joint design will affect performance.
- For a faster cure, use EUCOLASTIC II two part urethane.
- No heavy traffic until the product has cured.

Form Eucolastic I-3.01

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